



Numatic



TBL4045/50
TBL4045/100
TBL4055/50
TBL4055/100
TBL4055/50T
TBL4055/100T
SCRUBBER
DRYER

Proquip
NEW ZEALAND



Nu-Assist



Original Instructions

CAUTION, Read instructions before using the machine
Keep for future reference



numatic.com

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PLEASE READ BEFORE COMMENCING OPERATION

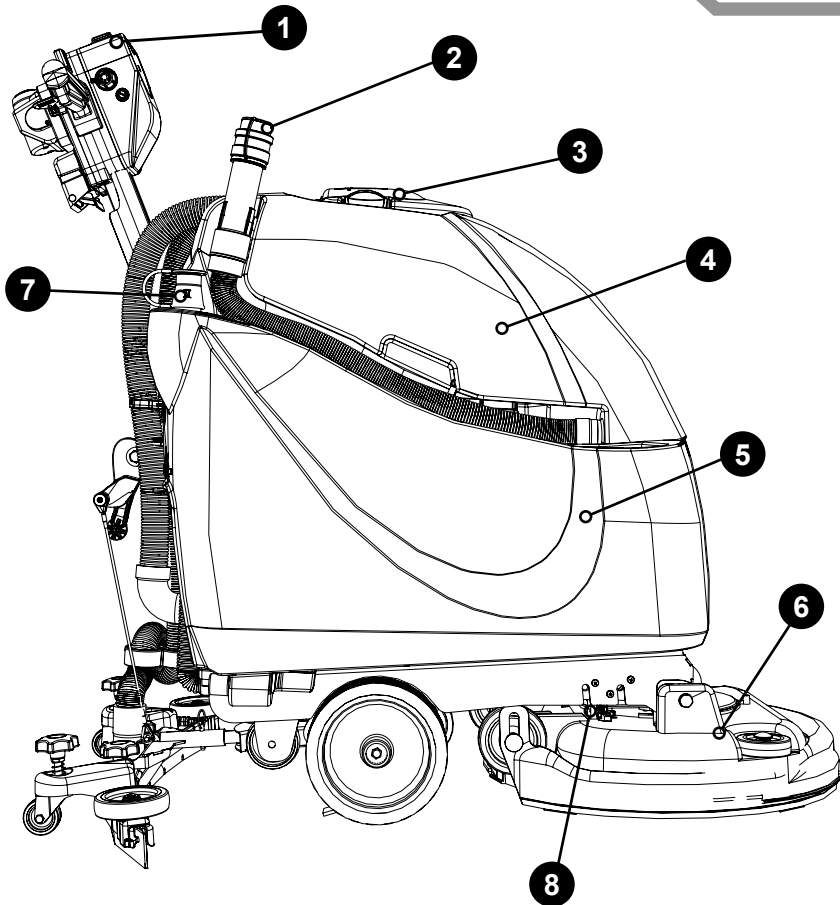
After the removal of all the packaging, carefully open and check the contents

- Owner Manual
- Battery Charging Lead
 - Scrub Brush
 - Floor Tool
 - Brush / Pad
 - Isolator Key
- 1 x 30 Amp Fuse (Brush)
- 1 x 20 Amp Fuse (Vac)
 - 1 x 2.5 Amp Fuse
 - Maxi Fuse-puller

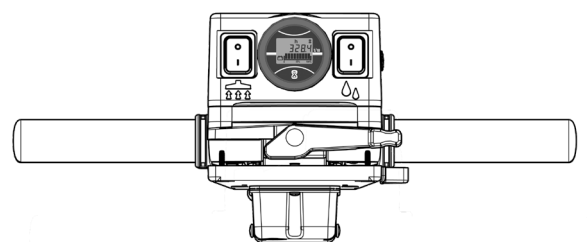
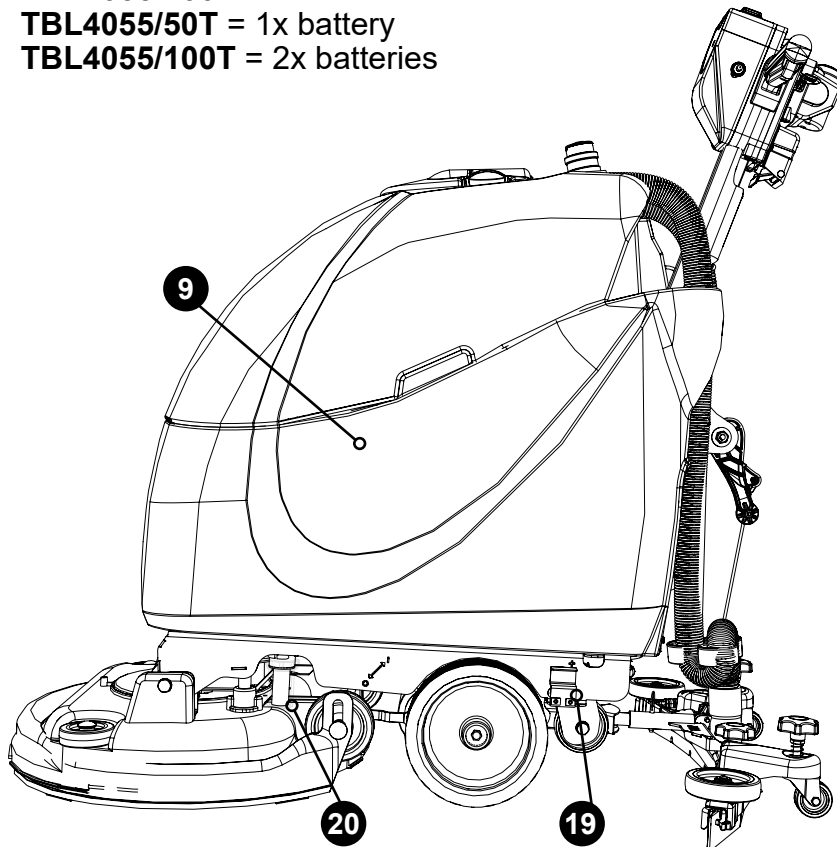
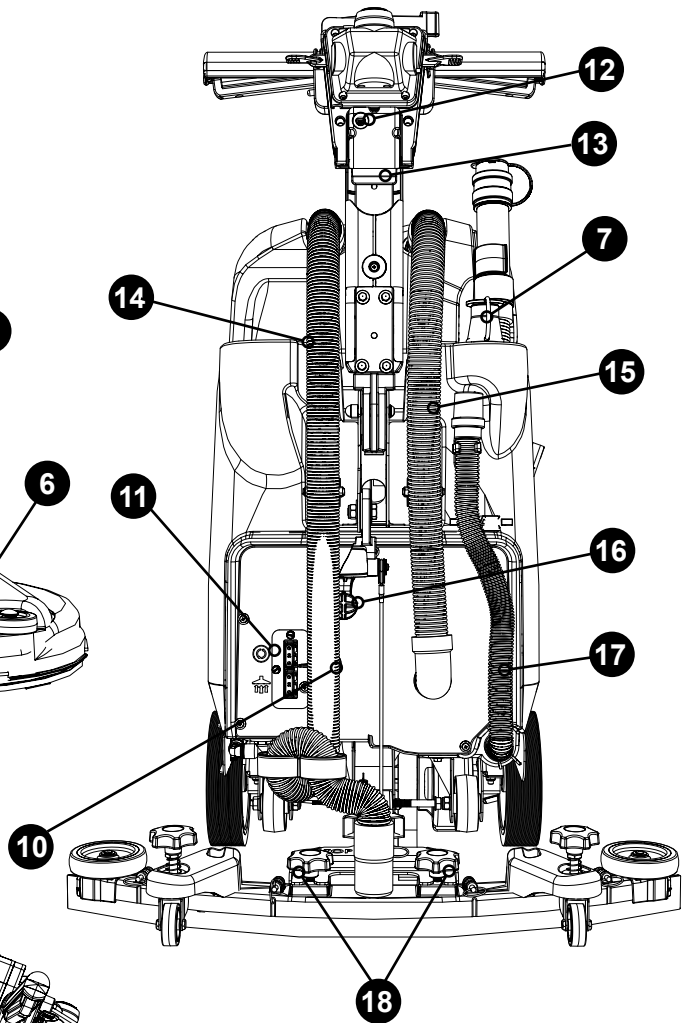
1	Control Panel
2	Top Tank (Waste-Water) Drainage Hose
3	Separator
4	Top Tank (Waste-Water)
5	Bottom Tank (Clean Water)
6	Brush Deck
7	Clean-Water Filler Cap and Hose
8	Deck Locking Mechanism
9	Battery Compartment
10	Isolator Key
11	Brush & Vacuum Motor Fuse
12	Charging Light
13	Charger Socket
14	Floor Tool Vacuum Hose
15	Vacuum Hose
16	Floor-Tool Lifting Lever
17	Clean Water Level Indicator / Drainage Hose
18	Floor-Tool Retaining Knobs
19	Clean-Water On/Off Tap
20	Clean Water Tank Filter

In the event of a breakdown contact
your Numatic dealer or the
Numatic Technical
Help line +44 (0)1460 269268

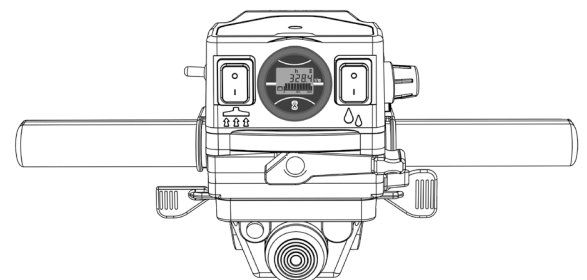
Machine Overview



TBL4045/50 = 1x battery
TBL4045/100 = 2x batteries
TBL4055/50 = 1x battery
TBL4055/100 = 2x batteries
TBL4055/50T = 1x battery
TBL4055/100T = 2x batteries

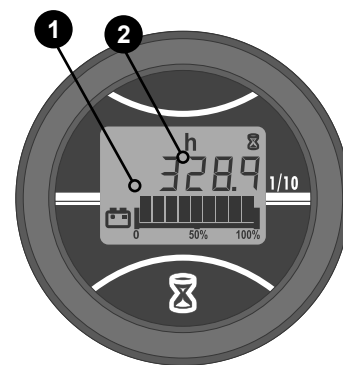
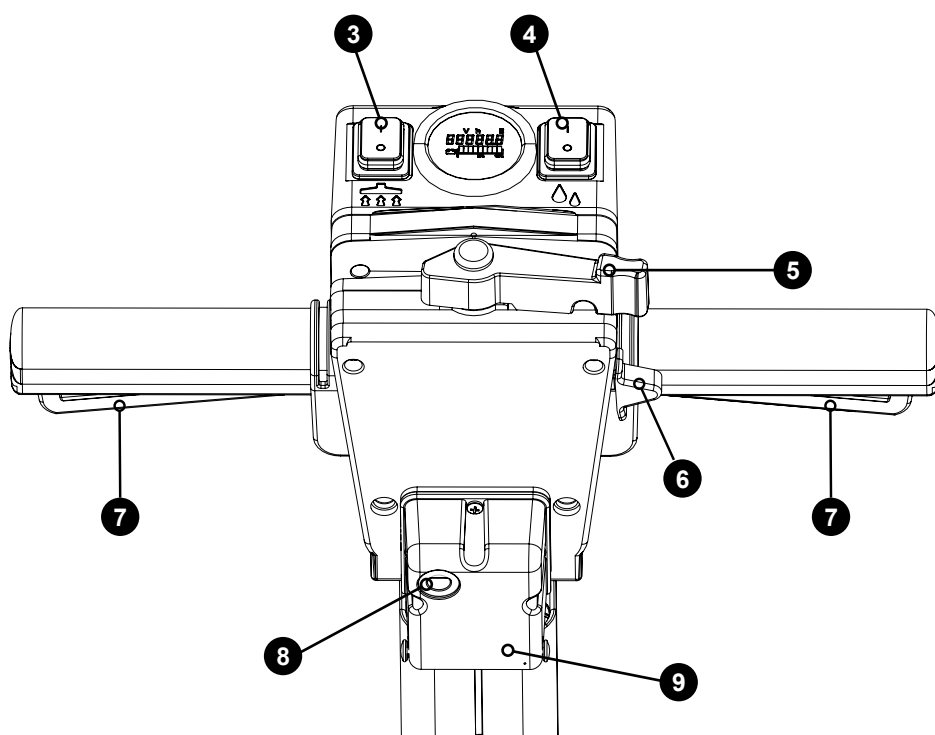


TBL4045
TBL4055



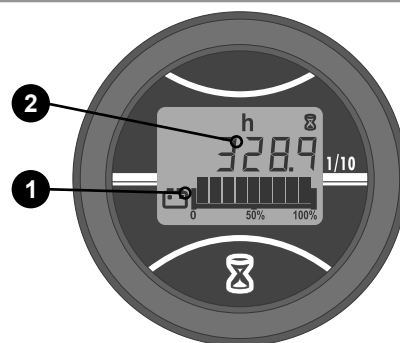
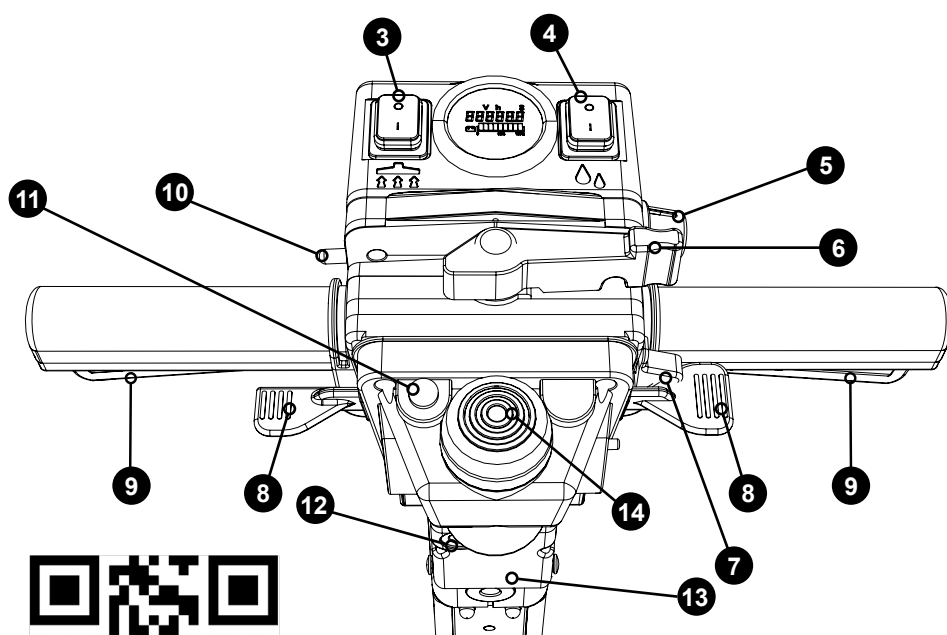
TBL4055T

Control Panel Overview TBL4045/ TBL 4055



1	Battery Charge Level Display
2	Hour Meter
3	Vacuum On/Off Indicator
4	Water Flow On/Off Button
5	Handle Position Lever
6	Start Switch
7	Start Triggers
8	Charge Indicator Light
9	Charge Socket

Control Panel Overview TBL 4055T



1	Battery Charge Level Display
2	Hour Meter
3	Vacuum On/Off Indicator
4	Water Flow On/Off Button
5	Speed Control Knob
6	Handle Position Lever
7	Start Switch
8	Speed Boost Levers
9	Start Triggers
10	Forward/Reverse Switch
11	Traction Status LED
12	Charge Indicator Light
13	Charge Socket
14	Anti Crush Switch



Traction model only

Machine Set-up Guide

PLEASE READ BEFORE COMMENCING ANY OPERATION AFTER THE REMOVAL OF ALL THE PACKAGING, CAREFULLY OPEN AND CHECK THE CONTENTS.

TBL CONTENTS

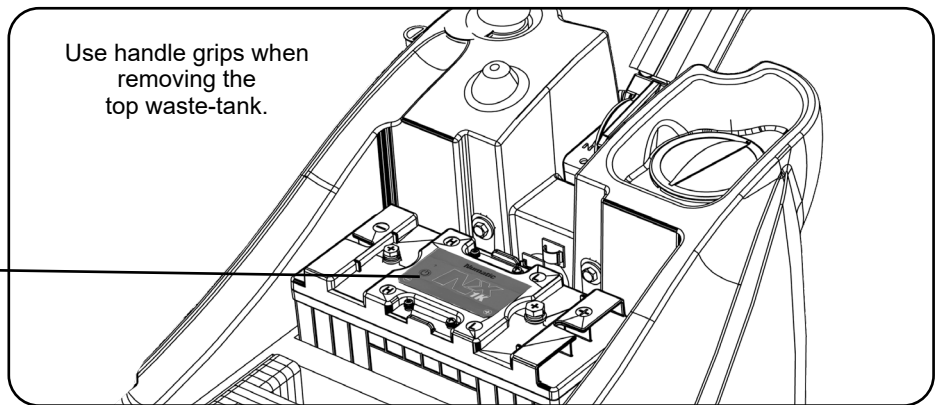
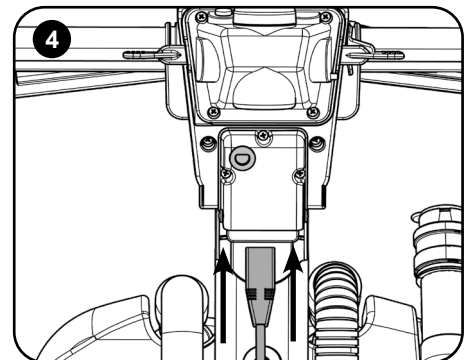
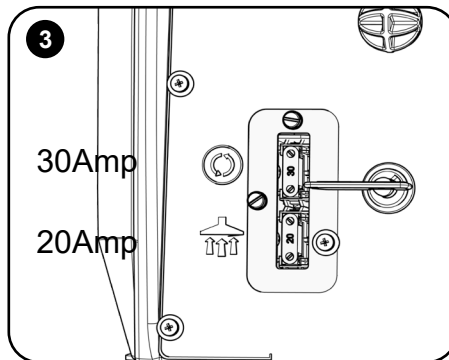
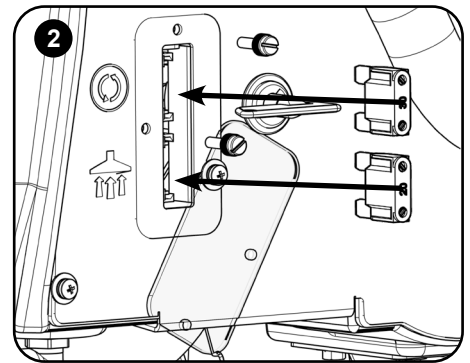
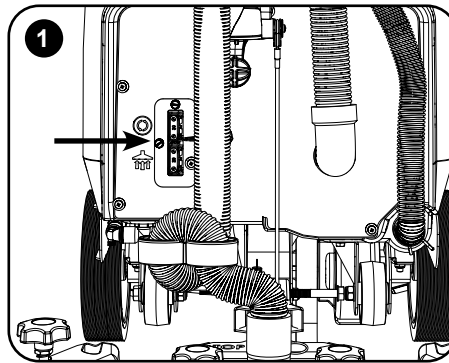
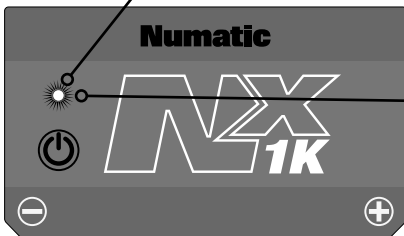
- Isolator Key
- 1 x 30 Amp Fuse (Brush)
- 1 x 20 Amp Fuse (Vac)
- 1 x 2.5 Amp Fuse • Maxi Fuse-puller

Open the fuse cover and fit vacuum and brush fuses (contained in start-up pack) into the fuse holders as illustrated. (Fig. 1, 2, 3.)

Charge the machine to activate the batteries (4).

Lift top tank assembly to reveal battery compartment, ensuring you use the handle grip provided.

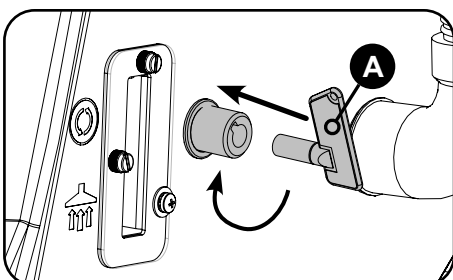
After the batteries are activated, LEDs should illuminate on the top of the battery/batteries



Numatic International Ltd recommends **ONLY** using 911948 NX1K LFP battery type Lithium Batteries provided with this machine.



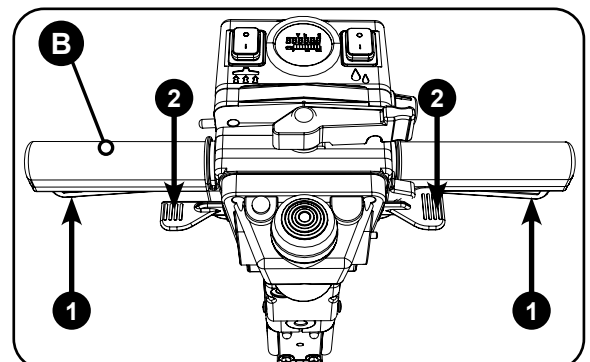
ENSURE THAT NO METAL OBJECTS COME INTO CONTACT WITH BATTERY TERMINALS WHILE THE BATTERIES ARE EXPOSED.



Insert Isolator Key into ignition located on the rear of the machine and switch the machine on. (Fig. A)

Select forward and slow speed then depress control triggers (1) with both hands and press the start switches (2) and slowly drive machine off the pallet. (Fig.B)

When the machine is removed and in a safe position, turn key back to the position (0) 'OFF'



TBL4055T only

Note: During vehicular transportation ensure the product is secured to avoid unnecessary movement.

Machine Set-up Guide

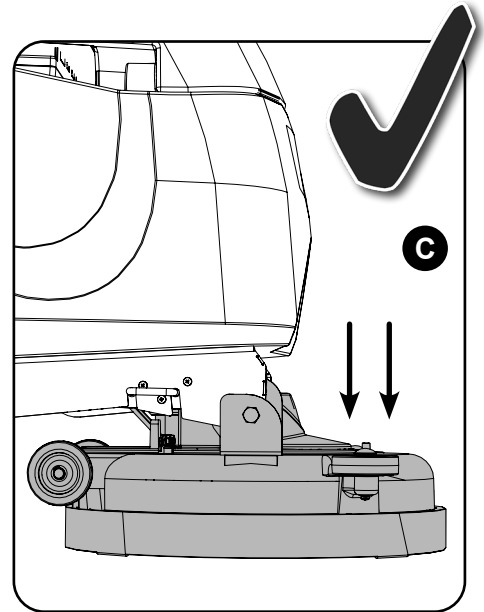
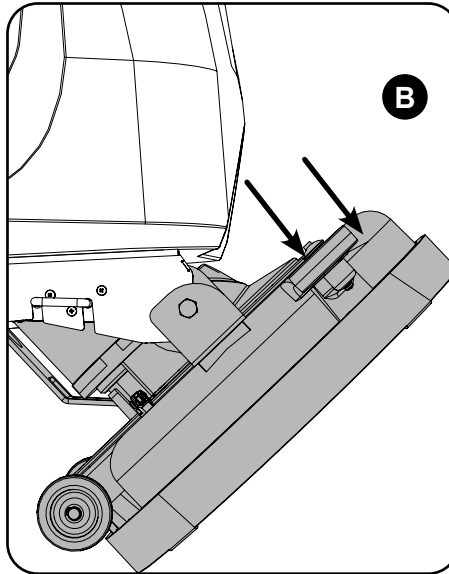
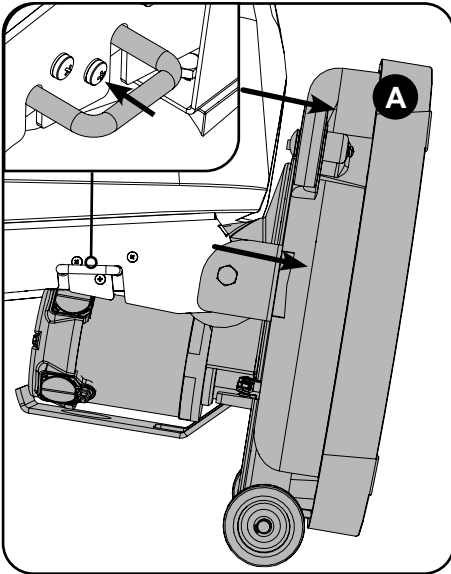


**ALWAYS ENSURE THAT THE MACHINE IS SWITCHED OFF
BEFORE MAKING ANY ADJUSTMENTS**



Raising/Lowering the Brush Deck

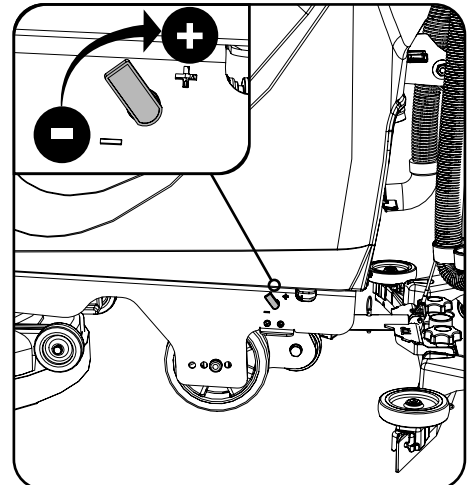
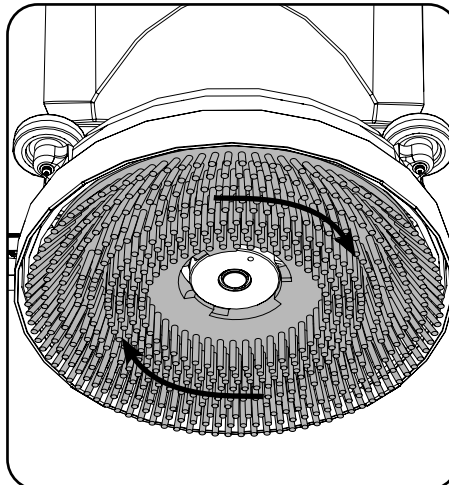
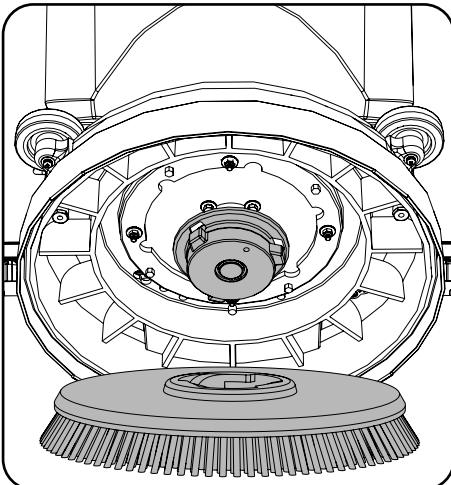
To tip the deck into the down position (Operating mode). Press in the brush deck locking pin (Fig. A) and rotate the brush deck (Fig. B & C). To change to brush deck up position, (Transit mode) simply lift the deck and the spring loaded locking pin will activate to hold the deck up.



Fitting the Brush/Pad Turn on Water

TBL4045 450mm Brush or 400mm Pad.
TBL4055 / TBL4055T 550mm Brush or 508mm Pad.
Featuring the Nuloc brush system.

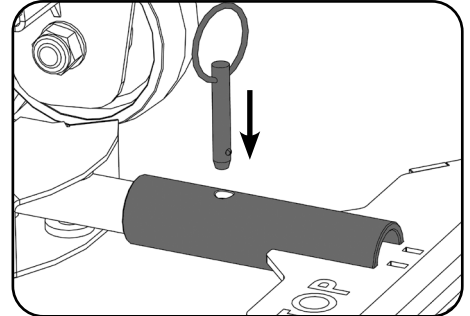
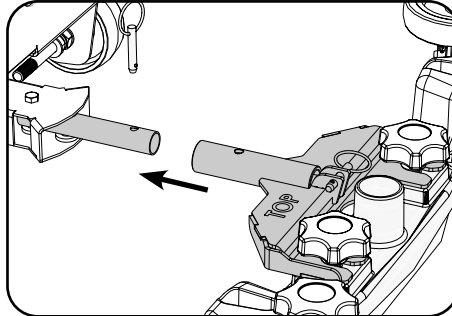
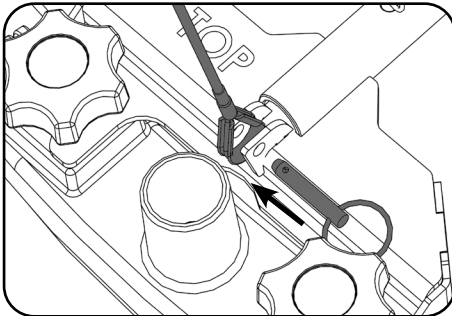
The brush is simply pushed and twisted to lock, making fitting and removal a simple process.
Slide the brush / pad under the brush deck.
Fit the brush / pad onto the Nuloc drive chuck, twist to lock the brush / pad in place.
Safety gloves are recommended for the changing of used brushes.
Turn on the clean water tap.



Fitting the Floor Tool

The floor tool has been designed for quick fitting, allowing easy squeegee blade replacement and a safety knock-off feature if the floor tool gets snagged, whilst in transit.

Note: It is easier to fit the floor tool if the weight of the machine is resting on the brush. Ensure the brush is fitted first.

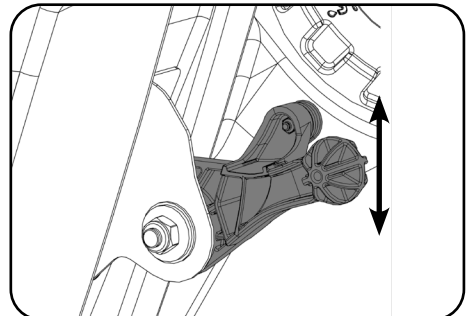
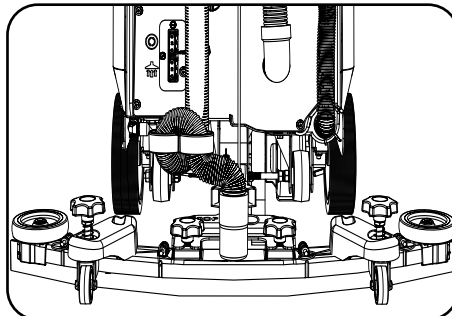


Fit the floor tool and retain using the detent pins.

Push waste collection pipe onto the floor tool; ensure a tight fit.

Note: DO NOT push the vacuum hose onto the floor tool with the floor tool in the raised position.

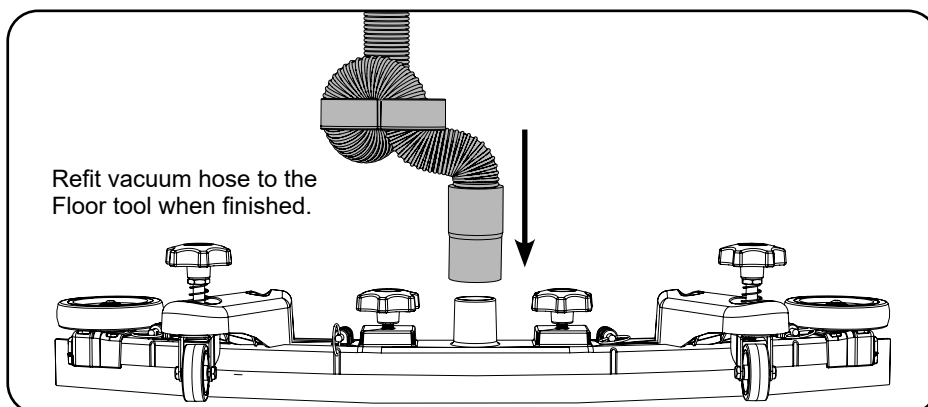
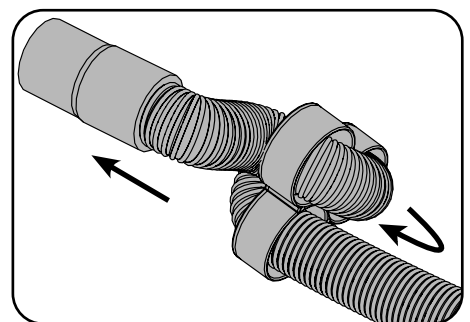
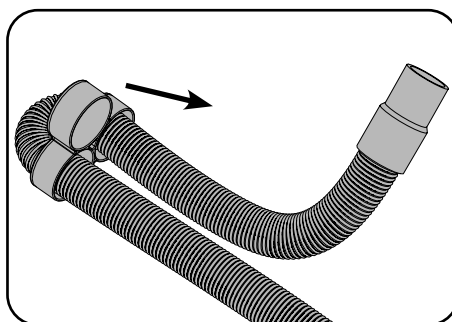
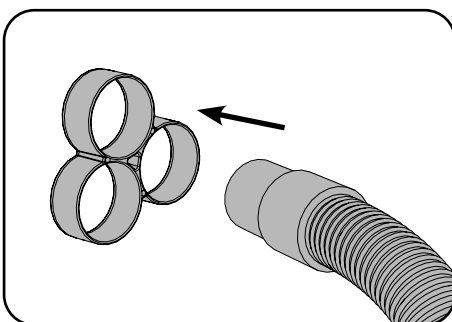
Raise the floor tool for transit or lower for cleaning operation using the lifting handle fitted to the back of the machine.



For fitting the floor tool blades
(See Page 12).

Fitting the Hose Guide

The vacuum hose has a U-bend clip which creates a U-bend in the hose preventing water spillage when the vacuum is switched off. If you need to remove the U-bend clip for any reason always ensure it is refitted correctly before you resume operation.

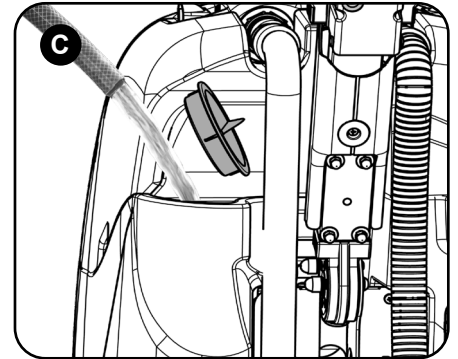
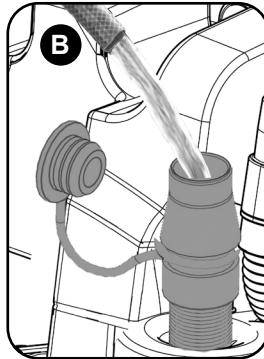
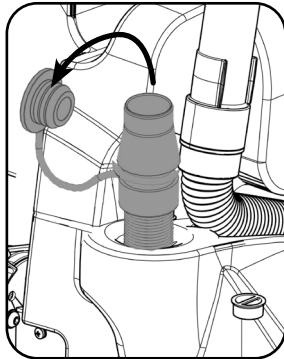
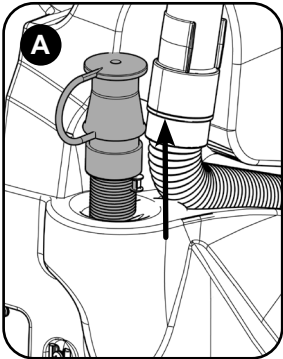


Refit vacuum hose to the
Floor tool when finished.

Note: DO NOT push the vacuum hose onto the floor tool with the floor tool in the raised position.

Machine Set-up Guide

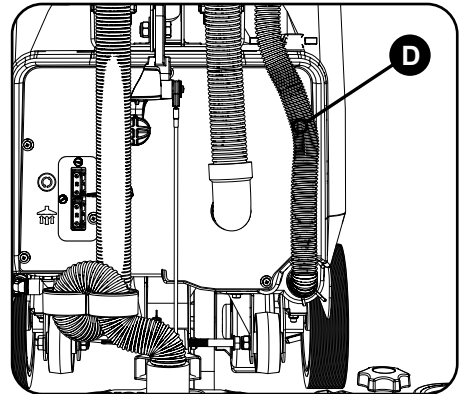
Filling the Clean Water Tank



To fill the clean-water tank, use the FLEXI - FILL pipe from either a tap or hose pipe (Fig. A & B). The large cap can also be used for filling from a bucket or suitable container (Fig. C). Fill the clean-water tank to MAX line indication on tank, including cleaning chemicals if required. Follow chemical manufacturing guide lines. The clear dump hose at the rear of the machine can be used to see the level of the clean-water (Fig. D).

Note: Great care must be taken to ensure that contaminants (leaves, hair, dirt, etc.) are not allowed to enter the clean water tank during the filling process. If using a bucket or similar, ensure it is always clean and free from debris.

Control of Substances Hazardous to Health (COSHH)
For best results use a non-foaming type of chemical recommended for use in auto scrubber dryers, dilute to the manufacturers specification. For further guidance on hazardous substances refer to health and safety instructions online.

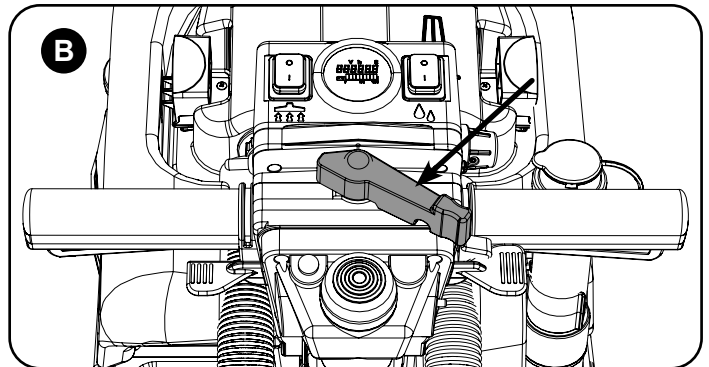
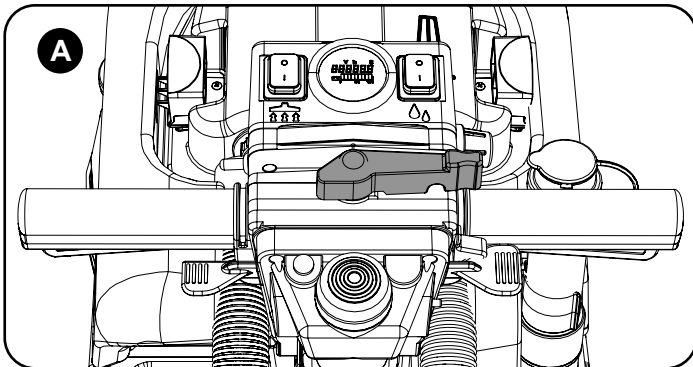


WHEN HANDLING AND MIXING CHEMICALS
Always ensure that chemical manufacturer's safety guidelines are followed.
Only use chemicals recommended for use in auto scrubber-dryers.



Handle Height Adjustment

Using the handle position lever, lower the handle to a comfortable working position.



IMPORTANT
Do not operate machine unless the Operator Manual has been read and fully understood.



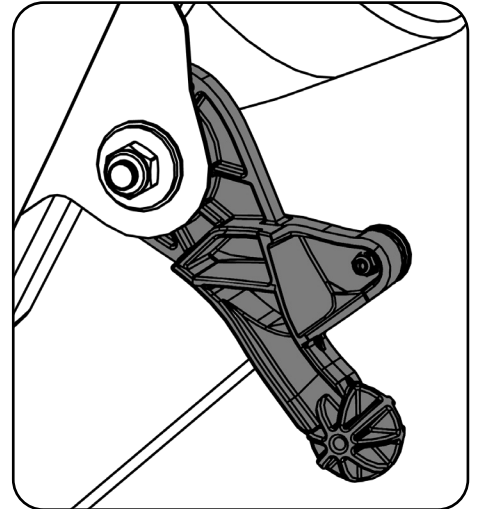
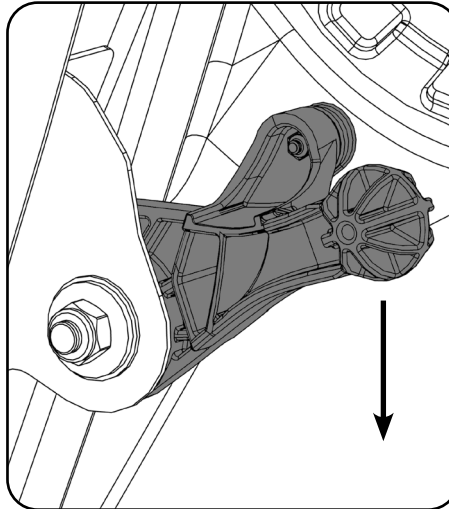
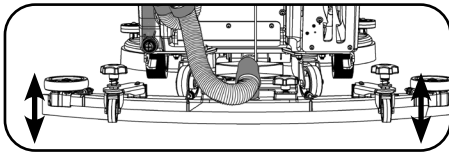
The machine is now ready to be moved to the cleaning site.
Before performing the cleaning operation, place out appropriate warning signs and sweep or dust-mop the floor.

Machine Operation

Raising/ Lowering the Floor Tool

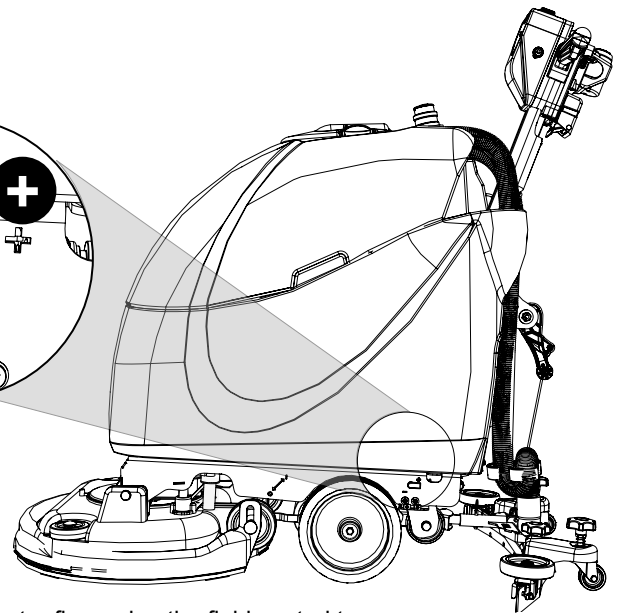
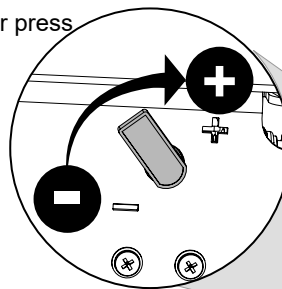
After preparing the floor (see previous section), we are now ready to set the controls to suit the cleaning conditions. Before any settings can be applied, ensure the brush deck is lowered. Move the floor tool lever to its lower position.

Note: Do not pull the machine backwards with the floor tool in the lowered position, this could possibly damage the blades.



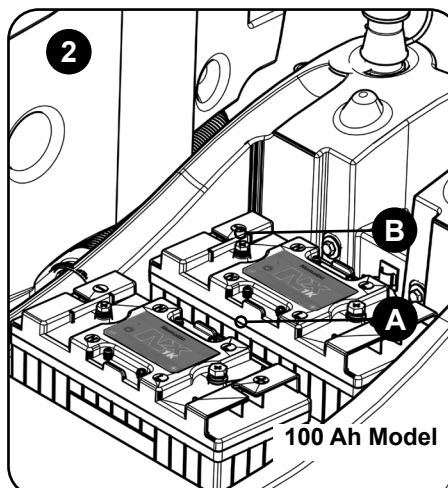
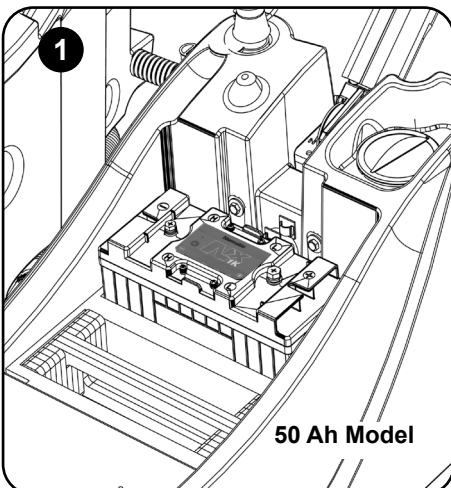
Setting the Cleaning Controls

Insert the isolator key into the rear of the machine and turn to the on position. To check the battery level, pull one of the Triggers (A) or press button (B).



Adjust water flow using the fluid control tap.

Brush Pressure



Your machine has been designed to work at the optimum brush pressure with a weight set added into the 50 Ah model in place of an additional battery 100 Ah model.



IMPORTANT

If the brush motor keeps overloading consider using a different type of brush. Heavy brush load decreases the available battery run time.

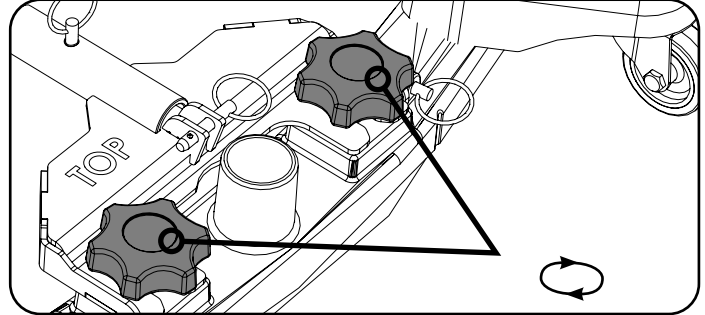
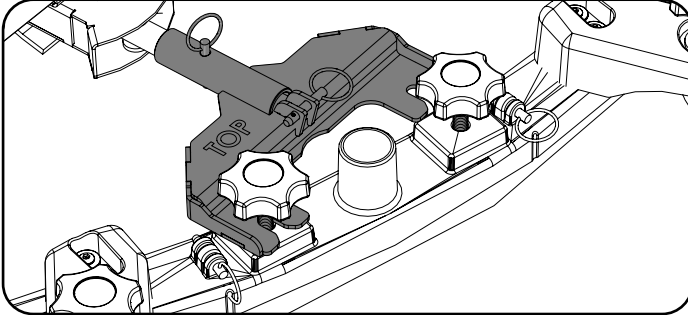


Machine Operation

Break-away Floor Tool

The floor tool design incorporates a break-away feature.

Allowing it to safely disengage from its mounting should it become caught on an obstruction, during forward machine movement. To re-attach the blade to its holder. First loosen the retaining knobs on the floor tool body and slide onto the holding bracket. Tighten retaining knobs to finger tight.



ALWAYS ENSURE THAT THE FLOOR IS PRE-SWEPT AND RELEVANT SAFETY SIGNS ARE DISPLAYED.

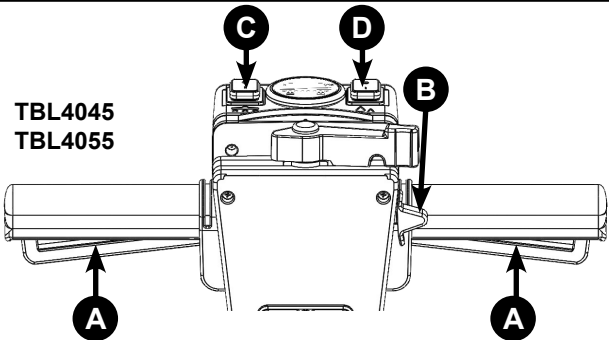


Insert the isolator key into the rear of the machine and turn to the on '1' position.

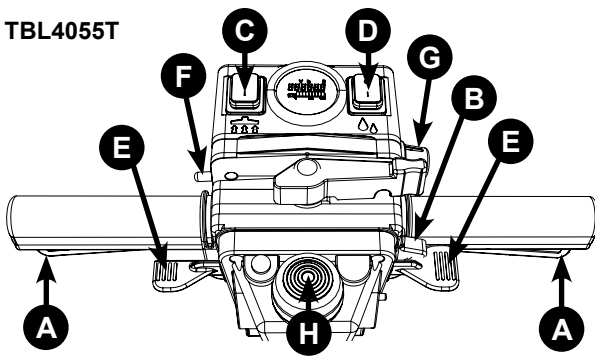
Switch on the Vacuum (C) and the water pump (D).

To operate the machine squeeze lever (A), then press yellow lever (B).

Releasing the Levers (A) will stop the machine.



TBL4055T



TBL4055T models only set direction of travel (F) and the desired traction speed as required (G), depending on floor type and level of soiling. Middle speed is the optimum cleaning speed.

Switch on the Vacuum (C) and the water pump (D).

To operate the machine squeeze levers (A), then press yellow lever (B). Releasing the Levers (A) will stop the machine.

Speed can be increased using the Speed Boost Levers (E).

The TBL4055T is equipped with an electronic braking system.

Simply release the hand operated start / stop trigger and the machine will stop.

This machine is fitted with an Anti Crush Switch (H). Instantly stopping and moving the machine forward if accidentally reversed into the operator.

After re-setting this switch, to restart the machine, turn the isolator key at the rear of the machine to '0' and then position '1'.

The waste water is then retrieved by the suction floor tool.

Overlap each scrubbing path by 10cm to ensure an even clean.

Do not operate on cleaning surfaces having a gradient exceeding that marked on the machine, when full.

On heavily soiled floors use a 'double scrub' technique.

First pre-scrub the floor with the floor tool in the raised position, allow the chemical time to work then scrub the area a second time with the floor tool lowered.

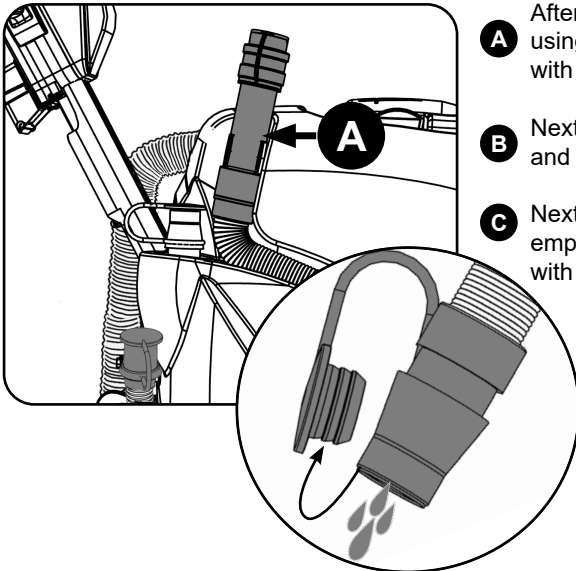
If streaking occurs wipe floor tool blades clean.

Note: Care must be taken to reduce speed when cornering or when manoeuvring around obstacles

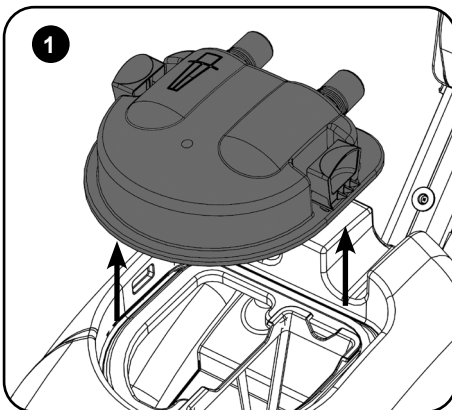
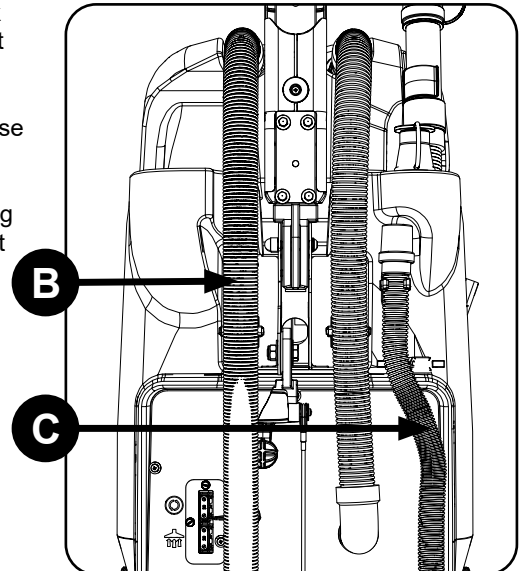
Regular Maintenance



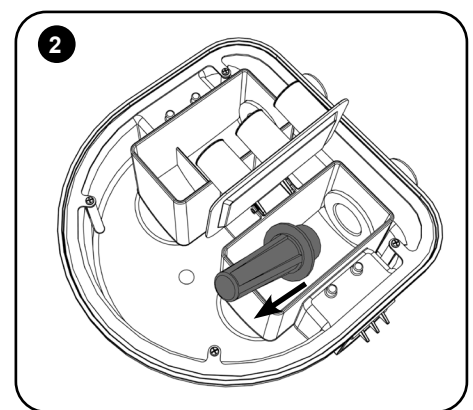
ALWAYS ENSURE THAT THE MACHINE IS SWITCHED OFF PRIOR TO ANY MAINTENANCE USING THE MASTER CONTROL ON/OFF KEY. REMOVE THE KEY PRIOR TO ANY MAINTENANCE OPERATION.



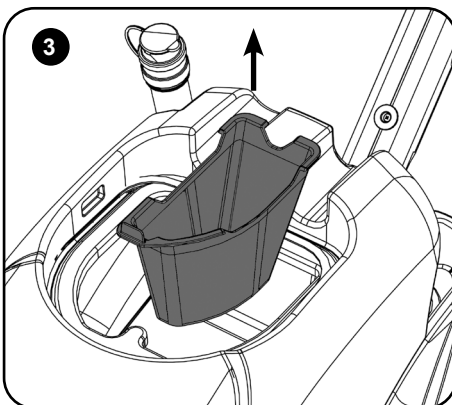
- A** After use, empty waste water tank using emptying hose and flush out with clean water.
- B** Next remove floor tool vacuum hose and flush out with clean water.
- C** Next empty clean water tank, using emptying hose and again flush out with clean water.



Whilst pulling the top tank separator toggles up and inwards, remove the separator. (Fig 1)
The separator has a sealing rubber which should be examined at every clean-down. Rinse the separator using clean water, remove the vac filter, clean and inspect for any damage. (Fig 2)

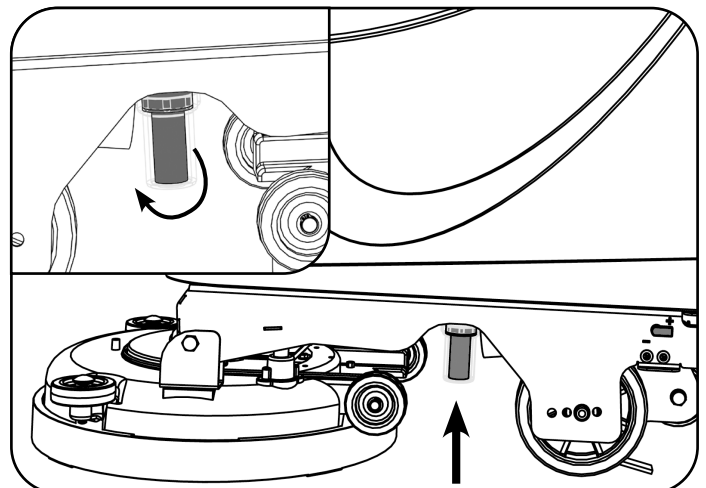


IMPORTANT
Never use the machine without the recommended filter as it may cause damage to the machine.
Remove debris basket filter and rinse using clean water, and refit. (Fig.3)



IMPORTANT

If the debris basket is allowed to become clogged, vacuum performance can deteriorate. Located under the left hand side is a clean water filter, make sure the clean water tank is empty before removing this filter.

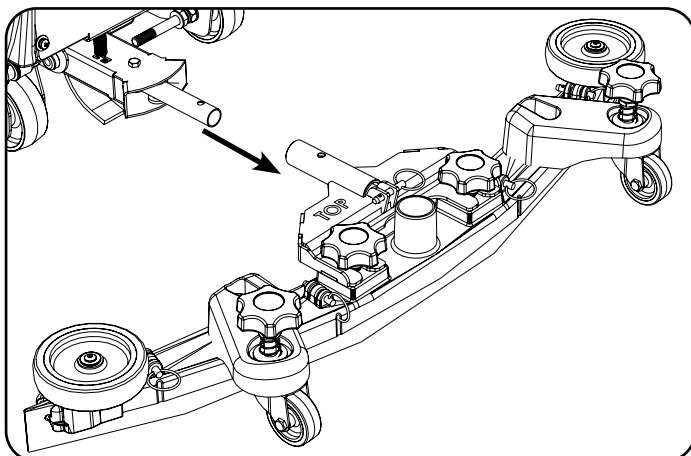


Note: To make access easier, raise the brush deck.

Changing the Floor Tool Blades



Always ensure that the machine is switched off prior to maintenance.



To clean the floor tool, remove securing-pin and pull-free from the holder.

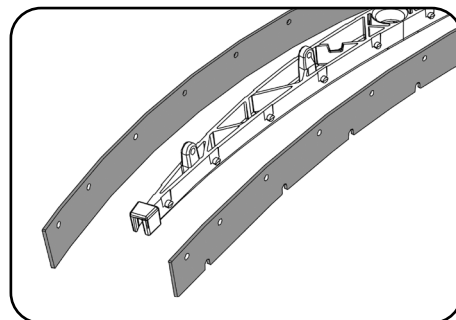
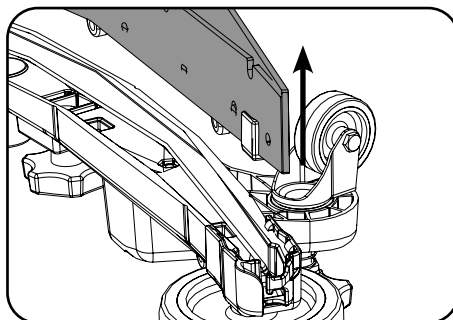
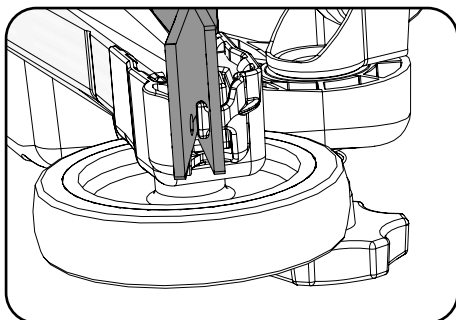
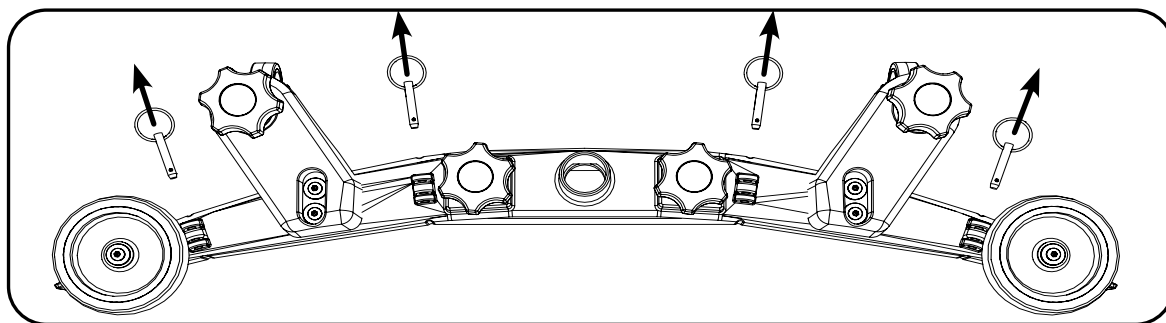
Rinse the floor tool assembly with clean water and refit.

Periodically the floor tool blades should be examined and checked for wear and damage.

The blade removal is easy. Simply start by removing the four retaining pins, turn the floor tool over and separate the blade carrier from the body.

Peel away the blades from their locating lugs and examine or renew as required.

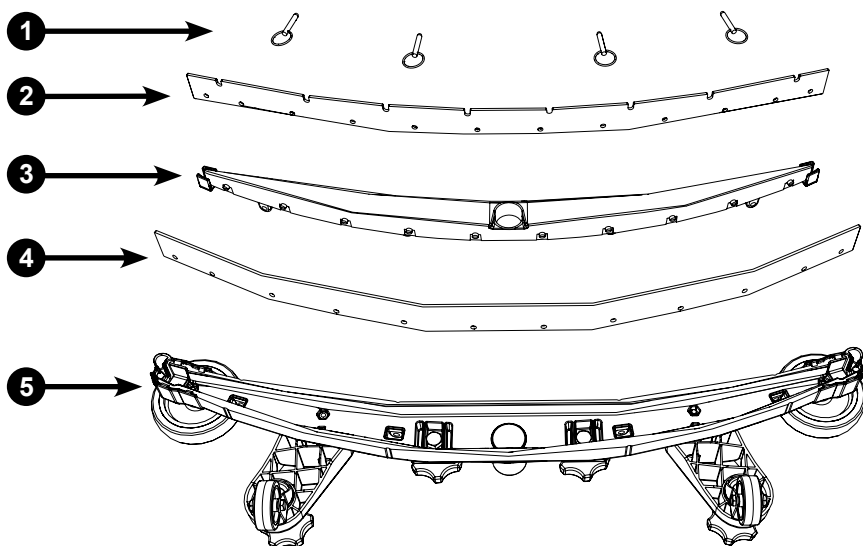
Replacement is a reversal of the removal process.



Floor Tool Overview

1. Retaining pins x 4
2. Front blade (slotted)
3. Blade carrier
4. Rear blade
5. Floor tool main body

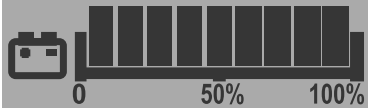
Note: The blades are designed to be reversible, thus extending their useful working life.



Machine Charging

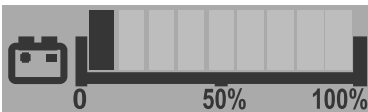
! Always ensure that the machine is switched off prior to charging. !

The battery meter displays the charge level of the batteries; when fully charged, all meter lights are illuminated.



1

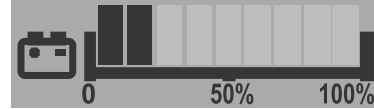
When the machine is getting close to empty the last light starts to flash, the operator should then take the machine to a suitable charging point. When the battery icon starts flashing, the vacuum and brush motors will be disabled and the user should charge the machine.



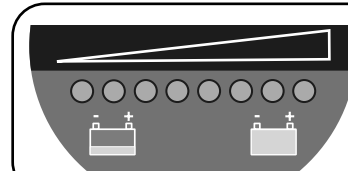
3

As the machine is used and the batteries are discharged, the meter lights will go out from right to left.

If the battery-charge level is allowed to discharge to the point that only one or two lights / bars remain illuminated, the operator must consider charging the machine.



2



Alternative Display

When the last red light starts flashing, the vacuum and brush motors will be disabled and the user should charge the machine.

The LFP batteries are sealed for life and are totally maintenance free.

The on-board charger automatically monitors the charging process and will switch to float charge mode when the batteries are fully charged. Float charge mode allows to maintain LFP batteries at the right level of health. The machine should be left on float charge overnight or over the weekend at least once per month or more frequently if needed.

Insert the charging lead required for your country into the charging point.

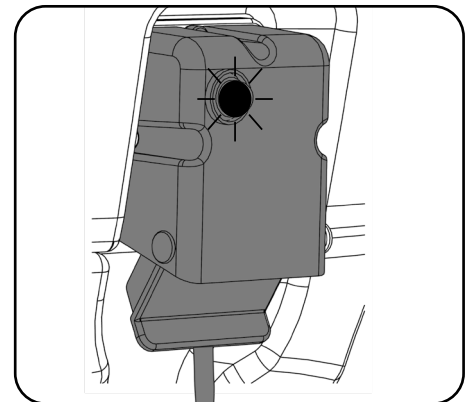
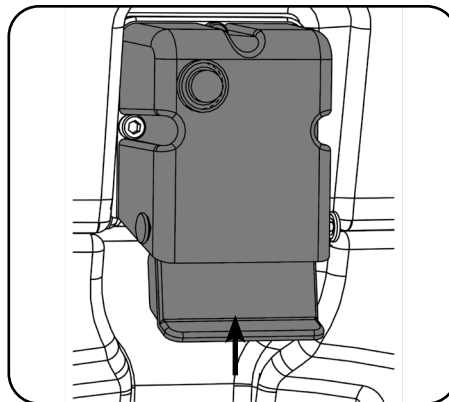
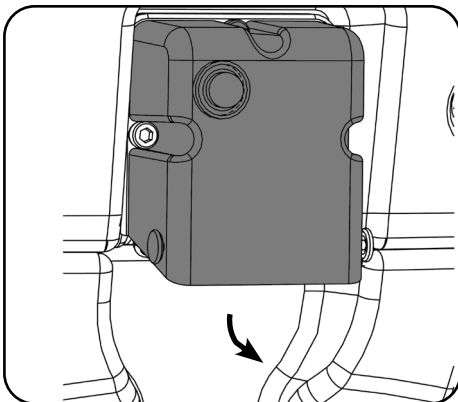
The machine charging point is located to the rear of the machine under the control panel.

Connect to a suitable power supply.

Once mains power is connected the red charging indicator will illuminate.

To ensure a full charge, from an empty state, the machine should be left for a period of 8 hrs.

Once fully charged, disconnect the charging lead from both the power supply and the machine.



Battery Care

! To ensure your machine remains at its maximum efficiency and prolong your battery life, please follow the simple steps below: !

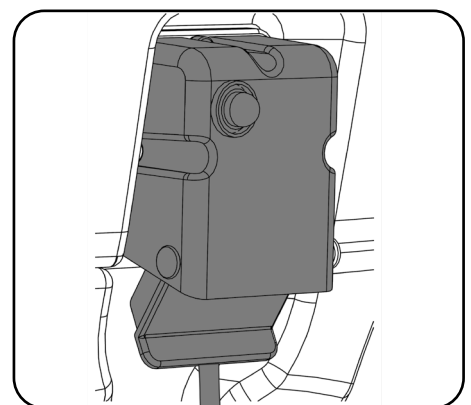
Under normal daily usage:

Re-charge the machine FULLY after each use regardless of machine operation time.

It is recommended to leave the machine connected to power grid overnight, at least once a month. If the user does not disconnect the cable after full charge it is not an issue.

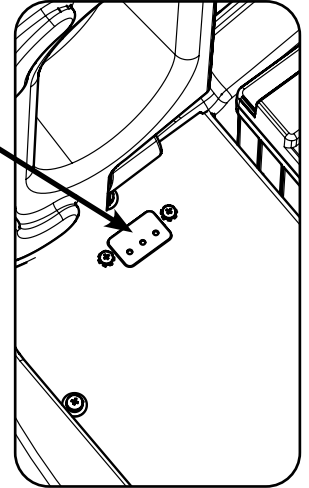
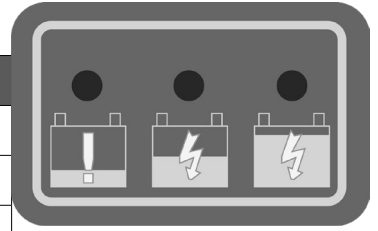
Do not leave the machine in a discharged state.

Periodically inspect the battery connections for tightness and corrosion.



Charging Light Sequence

Signal (LED)	Meaning																	
Red LED on	First Phase (Constant Current Mode).																	
Orange LED on	Second Phase (Constant Voltage Mode).																	
Green LED on	Third Phase (Constant Voltage Mode) Charge Complete. However, after full re-charge, leaving the charger connected moves to float-charge mode to help to maintain a healthy balance between batteries.																	
Red LED flashing followed by Pause	Cooling Fan Locked > 1 flash between pause. Over Voltage Protection / Output Short Circuit / Battery Reverse Polarity > 2 flashes between pause. Over Temperature Protection > 3 flashes between pause. Charge Time has exceeded 16 hrs during phase 1 or 2 > 4 flashes between pause.																	
	<table><tr><th>Condition</th><th>RED LED</th><th>YELLOW LED</th><th>GREEN LED</th></tr><tr><td>Pre-charge Timeout</td><td rowspan="4">Flashing 4 Times</td><td></td><td>O</td></tr><tr><td>CC Timeout</td><td>O</td><td></td></tr><tr><td>CV Timeout</td><td>O</td><td>O</td></tr><tr><td>Battery Disconnection</td><td></td><td></td></tr></table>	Condition	RED LED	YELLOW LED	GREEN LED	Pre-charge Timeout	Flashing 4 Times		O	CC Timeout	O		CV Timeout	O	O	Battery Disconnection		
	Condition	RED LED	YELLOW LED	GREEN LED														
	Pre-charge Timeout	Flashing 4 Times		O														
	CC Timeout		O															
	CV Timeout		O	O														
Battery Disconnection																		
Note: O means illuminates continuously																		



Note: Re-charge the machine fully after its last use. Do not leave the machine in a discharged state.

Under abnormal use;

i.e. leaving the machine without charging for a period of time, we advise that you follow these steps:

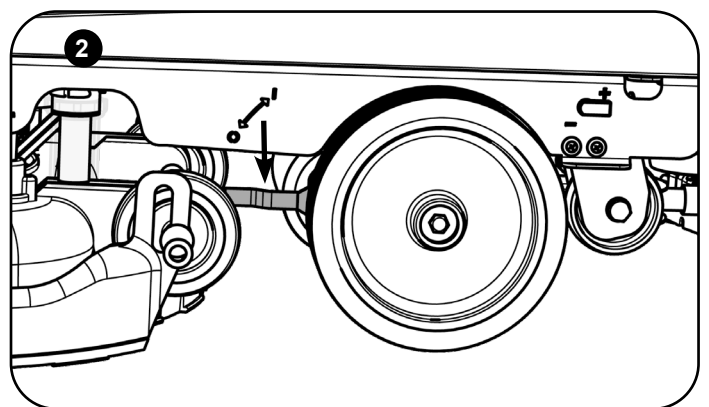
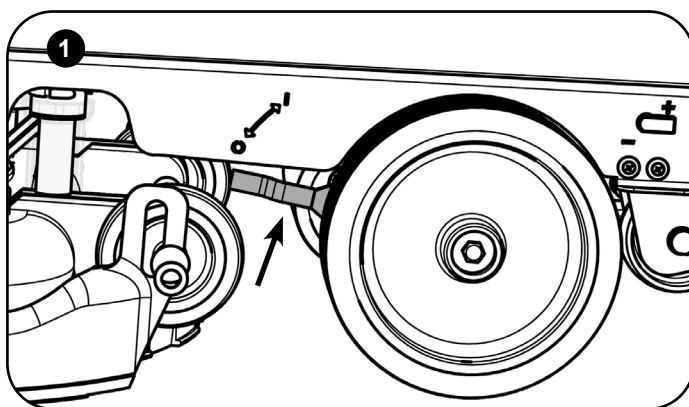
Float charge mode allows to maintain LFP batteries at the right level of health.

The machine should be left on float charge overnight or over the weekend at least once per month.

Charge fully the day before you start using the machine again.



Free Wheel Function



The machine is equipped with a free-wheel function that will enable the operator to move the machine manually if required.

The motor brake is located on the right side of the machine near the rear wheel.

Lift the Arm to the upper position for Drive (Fig.1). Lower the arm to disengage the drive (Fig.2).

The motor brake will be fully disengaged. The machine will now be in full free wheel mode.



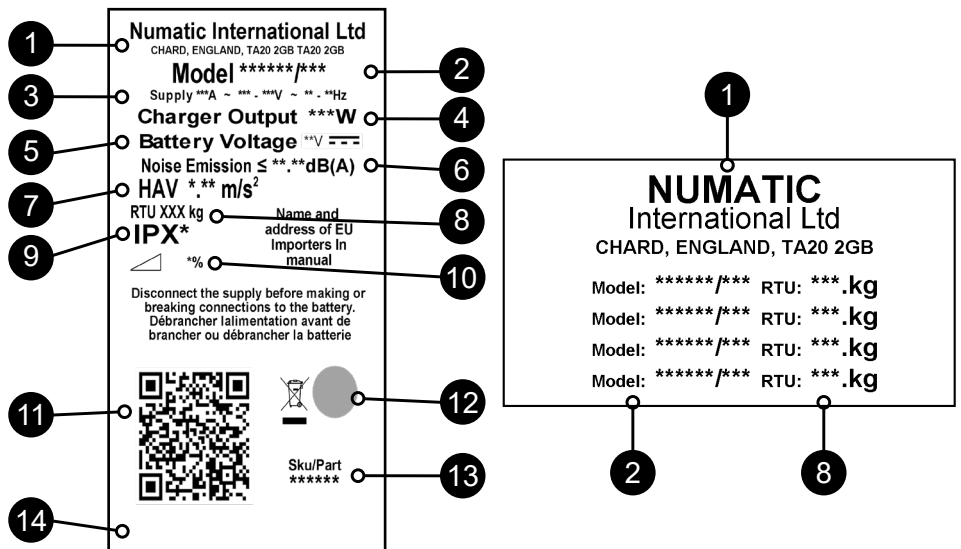
**ALWAYS ENSURE THAT THE MACHINE IS ON LEVEL GROUND BEFORE DISENGAGING BRAKE ARM.
NEVER DISENGAGE THE BRAKE WHEN THE MACHINE IS ON A SLOPE / GRADIENT.**



Note: Drive functions on the machine will not work whilst in free-wheel mode.
Remember to re-engage the drive when you reach your final destination / before using the machine.

About the Machine

Rating Label	
1	Company Name & Address
2	Machine Description
3	Supply Current / Voltage / Alternating Current / Frequency
4	Charger Output
5	Battery Voltage
6	Noise Rating
7	Hand Arm Vibration
8	Weight (ready to use)
9	Ingress Protection Rating
10	Max Gradient
11	QR Code
12	WEEE Logo / Approvals Mark
13	SKU / Part
14	Machine yr/wk Serial number



PPE (Personal protective equipment) that may be required for certain operations.

Ear Protection	Safety Footwear	Head Protection	Safety Gloves	
Dust / Allergens Protection	Eye Protection	Protective Clothing	Hi-Vis Jacket	Caution Wet Floor Sign

Note: A risk assessment should be conducted to determine which PPE should be worn.

Safety Critical Component:

Charging Leads: H05VV-F 3 Core x 1.0 mm²
 Battery Charger: 100V-240V (50-60Hz)
 DC Output: 25.6VDC, 20A
 Ref page 20 for component part numbers

Information for Scrubber Dryer

READ MANUAL BEFORE USE



COMPONENT	INTERVAL	INSPECT FOR
Mains Lead	DAILY	Scuffing, cracks, splits, conductors showing
Brushes	DAILY	Bristle damage, wear, drive collar wear
Squeegee Blade	BEFORE EACH USE	Wear, cracks, splits
Filters	BEFORE EACH USE	Clogging and debris retention
Tanks	AFTER EACH USE	Rinse dirty water tank after use



WARNING

Operators shall be adequately instructed as to the correct use of the machine.

As with all electrical equipment care and attention must be exercised at all times during its use, in addition to ensuring that routine and preventative maintenance is carried out periodically in order to ensure its safe operation.

Failure to carry out maintenance as necessary, including the replacement of parts to the correct standard could render this equipment unsafe and the manufacturer can accept no responsibility or liability in this respect.

When ordering spare parts always quote the Model Number / Serial Number specified on the Rating Plate.

Do not use on cleaning surfaces having a gradient exceeding that marked on the machine. While on ramps or inclines, avoid sudden stops. Avoid sharp turns. Use low speed down ramps. Clean only while descending (driving down) the ramp.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge. Children should be supervised to ensure that they do not play with the appliance.

When detergents or other liquids are used, read the manufacturer's instructions.

Only use brushes provided with the appliance or those specified in the instruction manual.

The use of other brushes may impair safety.

A full range of brushes and accessories are available for this product.

Only use brushes or pads which are suitable for the correct operation of the machine for the specific task being performed.

It is essential that this equipment is correctly assembled and operated in accordance with current safety regulations.

When using the equipment always ensure that all necessary precautions are taken to guarantee the safety of the operator and any other persons who may be affected.

Wear nonslip footwear when scrubbing. Use a respiratory mask in dusty environments.

The machine, while charging, must be positioned so that the mains plug is easily accessible.

When cleaning, servicing or maintaining the machine, replacing parts or converting to another function the power source shall be switched off.

Mains operated machines shall be disconnected by removing the power plug, and battery operated machines shall be disconnected by using top ON/OFF button on the battery.

In order to prevent unauthorised use of the machine the power key must be removed after use.

Machines left unattended shall be secured against unintentional movement.

When detergents or other liquids are used, read the manufacturer's instructions.



CAUTION

This machine shall be stored indoors only
This machine is for indoor use only.

NOTES: This machine is intended for commercial use, for example in hotels, schools, hospitals, factories, shops, offices and rental businesses.



DO

- Ensure only competent persons unpack/assemble the machine.
- Keep your machine clean.
- Keep your brushes in good condition.
- Replace any worn or damaged parts immediately.
- Regularly examine the power cord for damage, such as cracking or ageing. If damage is found, replace the cord before further use.
- Only replace the power cord with the correct Numatic approved replacement parts.
- Ensure that the work area is clear of obstructions and / or people.
- Ensure that the working area is well illuminated.
- Pre-sweep the area to be cleaned.



DON'T

- Use steam cleaners or pressure washers to clean the machine or use in the rain.
- Attempt machine maintenance or cleaning unless the power plug has been removed from the supply outlet.
- Allow any inexperienced repairs. Call the experts.
- Strain cable or try to unplug by pulling on cable.
- Leave the brush pad on the machine when not in use.
- Allow the machine to be used by inexperienced or unauthorised operators or without appropriate training.
- Use the machine without the solution tanks properly positioned on the machine, as shown in the instructions.
- Expect the machine to provide trouble-free, reliable operation unless maintained correctly.
- Run the machine over power cable during operation.
- Lift or pull the machine by any of the operating triggers, use the main handle.
- Remove the handle from the machine except for service and repair.

Information for Scrubber Dryer



READ MANUAL BEFORE USE

Precautions when working with batteries

1. Always wear protective clothing e.g. face visor, gloves and overalls when working with batteries.
2. Whenever possible always use a properly designated and well-ventilated area for charging.
Do not smoke or bring naked flames into the charging area.
3. Remove any metallic items from hands, wrists and neck i.e. rings, chains etc. before working on a battery.
4. Never rest tools or metallic objects on top of the battery.
5. When charging is complete disconnect from the mains supply.
6. The batteries must be removed from the machine before it is scrapped.
7. The machine must be disconnected from the supply when removing the battery.
8. To remove the batteries:- Disconnect machine from the mains supply (if charging) and ensure batteries are switched off using the button that is placed on the battery top. Disconnect hoses from separator and tanks.
Remove separator and tanks. Unscrew battery strap fixings and remove.
Undo battery terminals and remove. Remove batteries.
9. The batteries are to be disposed of safely, as according to local government guidelines.
10. Only use genuine Numatic replacement batteries.
11. Do not allow the batteries to become fully discharged; it may not be possible to re-charge them.
Batteries should not be discharged below 22.5 volts with 10 amps flowing.
12. Do not allow one battery to be discharged separately to the other.
13. Do not mix batteries from different machines.
14. The batteries fitted to this product are Lithium-ion (Li-ion), Lithium Iron phosphate (LFP) type.
The fitting of any other type of battery may cause a safety hazard.
15. Switch off the battery using top ON/OFF button before cleaning or maintenance.

Battery Care

1. Battery Storage:
 - a. Batteries must be stored in a dry, level and clean location not exceeding a temperature range of 15°C ~ 25°C.
 - b. Batteries must be fully charged every 6 months when on-the-shelf or if the battery voltage reduces to 25V.
 - c. Batteries must be put into use within 12 months of the date of manufacture, failure to do so will lead to reduced capacity in the field. (battery date code) -
ZP19006F YYW W0 0001
- Serial number
Week of Production
Year of Production
- d. If a battery does not want to switch ON and the green LED on the top is not illuminating, irreversible damage has occurred. Under this condition, a battery should not enter into service and should be disposed of according to local authority guidelines.
2. During Use:
 - a. Batteries must be recharged after every use regardless of machine run time.
 - b. If the machine is to be left dormant for any length of time complete the following:
 - i. Fully charge the batteries.
 - ii. Do not leave batteries dormant for more than 6 months.

Daily

Keep the machine clean.
Ensure brushes/ pads/ squeegee/ filters are in good condition.
Check for any worn or damaged parts and replace immediately.
Drain and rinse dirty water tank after every use.
Store machine with brush deck secured in the elevated position.

Weekly – as daily and –

Check brush or pad and skirt and rinse.
Check floor tool blades for wear and wipe clean.
Clean separator assembly including filter and check condition of seal.
Flush out system with clean water and clean filters.

Batteries

Always re-charge the batteries after use.
Charge for a minimum of 4 hours. Leave the battery on charge overnight, at least once per month.
After it has been fully charged, this will prolong battery life.

TwinTec
Maintenance

Numatic Lithium-ion Rechargeable Battery

25.6V | 50Ah | 1280Wh | LFP26148129

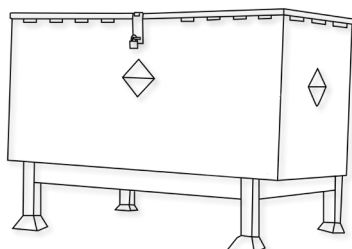


It is important that you observe the following information and warnings!

Emergency Contact Information		
Address:	Shenzhen ACE Battery Co.,Ltd Room 201, BAK Technology Building, No. 9 Keyan Road, Maling Community, Yuehai Street, Nanshan District, Shenzhen, Guangdong Province 518054, P.R. China	NUMATIC INTERNATIONAL LTD Millfield Road, Chard, Somerset, TA20 2GB, UK
Tel:	0086-755-83283710	0044-146-068600
www.numatic.co.uk www.numatic.de www.numatic.ch www.numatic.fr www.numatic.nl www.numatic.co.za www.numatic.pt www.numatic.es		

1. DEFECTIVE BATTERIES

1. If a customer wishes to return a battery to a supplier after removing from product, then collection of the battery must be arranged by the supplier; however, **Faulty batteries must not be returned through the postal system or by courier.**
2. If on return to a supplier, OR at a customer base, a suspected defective battery shows any signs of impact damage, distortion, blistering, loose parts or leakage then on no account should it be offered for condition checking. It must be considered defective and the procedures described from item 6 below should be followed.
3. If, on return to a supplier, OR at a customer base, a suspected defective battery, that shows No signs of impact damage, distortion, blistering, loose parts or leakage, may be offered for condition checking with an appropriate battery condition checking device operated by a competent person.
4. If checking shows the battery to be defective then the procedures described from item 6 below should be followed.
5. **On no account must any further attempt to recharge be made. A defective battery should not be stored inside buildings on any account.**
6. The defective battery must be switched off, and all electrical terminals sufficiently insulated to remove risk of short circuit. The defective battery can then be stored in a locked battery waste container which should be plastic or plastic lined and placed away from buildings and combustible materials and clearly signed as a defective battery container with appropriate warnings. Defective batteries should be sent for waste disposal / recycling according to your country waste regulations.



An example of a waste battery storage bin well away from buildings.

2. HANDLING AND STORAGE

DANGER!

Improper handling can lead to an explosion or ignite a fire!
Store batteries out of reach of children.

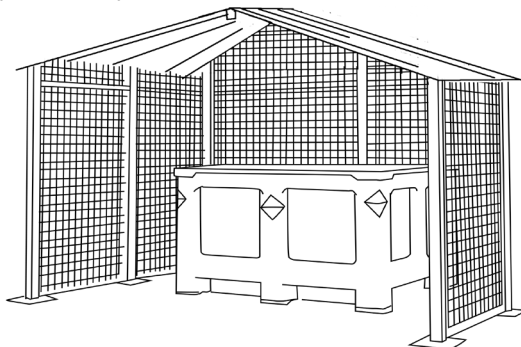
- Only trained staff can fix the battery in the machine.
- Storage temperature range: -10°C~40°C.
- Temperatures must not exceed 40°C.
- Relative humidity range: 20% to 80%.
- Optimum preservation of functionality: 15°C~25°C.

WARNING:

- Do not open the battery, disassemble it or allow it to fall from a substantial height.
- Protect the battery against short-circuiting – danger of explosion!
- Protect the battery against rain, do not immerse in liquids – danger of short-circuiting.
- Protect the battery against direct sunlight, heat and fire.
- Do not incinerate the battery – danger of explosion!
- Do not use defective or deformed batteries.
- Use only original Numatic specific appliances to charge and discharge batteries.

STORAGE:

- Good batteries should be stored in a protected area away from sources of direct heat and sunlight and should be kept dry.
- The temperature should not exceed 40°C but preferably not be above 25°C to maintain good battery performance.
- Storage area should be of low humidity, non dusty and a non corrosive atmosphere.



- An example of a well protected area with a cage to protect against accidental impact damage and with the batteries stored in a protective container to protect from heat, impact and accidental spillage of liquids.
- Care when handling / moving with forklift trucks or pallet trucks is needed at all times to avoid any physical damage to the batteries.
- If a good battery at any time is mishandled or subjected to any conditions that may damage it, as described in the battery Instruction manual supplied, it must then be considered as defective and procedures followed from Item 1 of this document overleaf.

3. HAZARDS IDENTIFICATION

- Electrolyte may escape from damaged batteries. Avoid contact.
- Contact can cause skin irritation, burns and chemical burns.
- If liquid comes into contact with eyes, seek medical attention.
- Avoid inhaling any vapours formed or released from the battery – Contains caustic alkaline electrolytes.
- Warning - Risk of fire - This battery contains No user serviceable parts.

4. FIRST AID MEASURES

In the event of contact with released electrolyte or electrolyte vapours:

- Eye contact – flush eyes for at least 15 minutes with plenty of clean water without rubbing and seek medical attention.
- Skin contact – wash affected areas of skin with plenty of water and soap; if irritation persists, seek medical attention.
- Inhalation – provide fresh air or administer oxygen immediately and seek medical attention.
- Ingestion – if electrolyte has been ingested, seek medical attention immediately.

Information for physicians:

- Contains caustic alkaline electrolytes in cells with Lithium Iron Phosphate – NO LITHIUM METAL OR LITHIUM ALLOYS.

5. FIRE FIGHTING MEASURES

- In case of fire – Keep clear of vapours and gases generated, take wind direction into consideration. If possible without danger, remove batteries from the vicinity of the fire. In principle, cooling or extinguishing with water is possible, but should only be done by trained personnel with sufficiently large quantities of water.
- If the hazard situation is unclear, extinguish only with ABC powder extinguishers (Class D extinguishers for fires involving metals are especially suitable).
- Fire fighters should only approach the fire wearing protective clothing and self-contained breathing apparatus.
- Once the fire has been extinguished, as a rule, the area should be monitored (fire watch) and cleaned up by trained and appropriately equipped personnel; fire residue should be contained and disposed of properly.

6. EXPOSURE CONTROLS, PERSONAL PROTECTION

Respiratory Protection:

- In case of battery venting, providing as much ventilation as possible. Avoid confined areas with venting batteries.
- Respiratory Protection is not necessary under conditions of normal use.

Ventilation:

- Not necessary under conditions of normal use.

Protective Gloves:

- Not necessary under conditions of normal use.

Other Protective Clothing or Equipment:

- Not necessary under conditions of normal use.
- Personal Protection is recommended for venting batteries: Respiratory Protection, Protective Gloves, Protective Clothing and safety glass with side shields.

7. ACCIDENTAL RELEASE

Disposal – Wear protective clothing and equipment, wipe up with absorbent textile and dispose of as hazardous waste at collection points for hazardous waste according to national regulations.

8. DO

- Use NUMATIC batteries only with NUMATIC appliances and charge them only using NUMATIC chargers.
- Charge battery before use.
- Store the battery out of the reach of children.
- Protect from rain – do not immerse in fluids.
- Protect from direct sunlight, heat, and open flames.
- Keep a battery that is not in use away from metal objects, (e.g. nails, coins, jewellery).
- Follow the disposal advice of the manufacturer and any internal waste management guidance.
- Use and store the battery with-in temperature range (as shown in Temperature Range Table).
- Always switch off the battery using the button by holding it for 6 seconds, before disconnection and handling.
- To activate / turn ON the battery please hold the top button for 6 seconds **or alternatively** charge the battery using original Numatic specific chargers.



Warning: The battery must only be charged by the Numatic Charger supplied with the product and under NO circumstances should an alternative non Numatic charger be used as there is a risk of severe damage and fire could result.

Note* "If batteries are subjected to temperatures beyond normal operating limits automatic shutdown will occur. Under these conditions allow the batteries to acclimatise at room temperature (18°C – 22°C) for several hours to allow the battery to wake up".

Temperature Range Table	
CHARGING	5°C~35°C
DISCHARGING	-10°C~35°C
STORAGE OPTIMUM	15°C~25°C
STORAGE LIMIT	-10°C~40°C

9. DO NOT

- Throw battery into fire – risk of explosion!
- Charge or use a defective, damaged or deformed battery.
- Open, damage or drop the battery.
- Expose the battery to microwaves or high pressure.
- Bridge (short circuit) the battery terminals with metallic objects since this may damage the battery.
- Use metal containers for transporting batteries.
- Expose the batteries to high temperatures including direct sunlight.
- Crush, break open or physically abuse the batteries or the equipment that contains them.

10. DISTRIBUTOR TAKE-BACK / DISPOSAL



- On the basis of the Battery Directive, the manufacturers take responsibility for financing collection, treatment and recycling of batteries used in devices. To this end, batteries must be handed over for disposal to the collection systems established for this under national law. Disposal of batteries together with household waste is prohibited; batteries must be collected separately according to type.
- Return the battery free of charge to your NUMATIC servicing dealer for disposal or hand it over to an appropriate public collection point.

11. CHARGING BATTERIES

- The charger is intended for use only in the machine where it has been installed. The charger is intended for use with the detachable power cord supplied, the power unit is capable of operating at different voltages without user adjustment. If the charger is damaged or does not charge anymore, please return to service centre.

CAUTION!

- Check the mains cord regularly for any sign of damage.
- Do not use damaged devices.
- If the mains cord of the charger is damaged, it must be replaced by an original NUMATIC mains cord available from the manufacturer or service agent.

12. WARRANTY

Lithium-Ion Battery Warranty

Warranty: Commercial Use

a. Batteries are warranted for (3 Years) as standard. ***Note:** Numatic dealerships outside of the UK may provide longer warranty periods. Please confirm with your Numatic dealership on purchase of your product.

b. To claim warranty the following details must be supplied

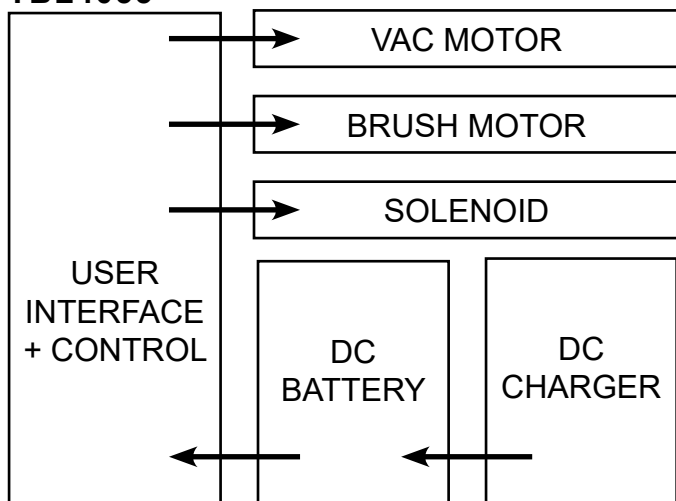
- Serial number of the machine
- Battery date code
- Date purchased
- Proof of Purchase
- Maintenance history and charging regime

Failure to use the correct Numatic charger will void your warranty.

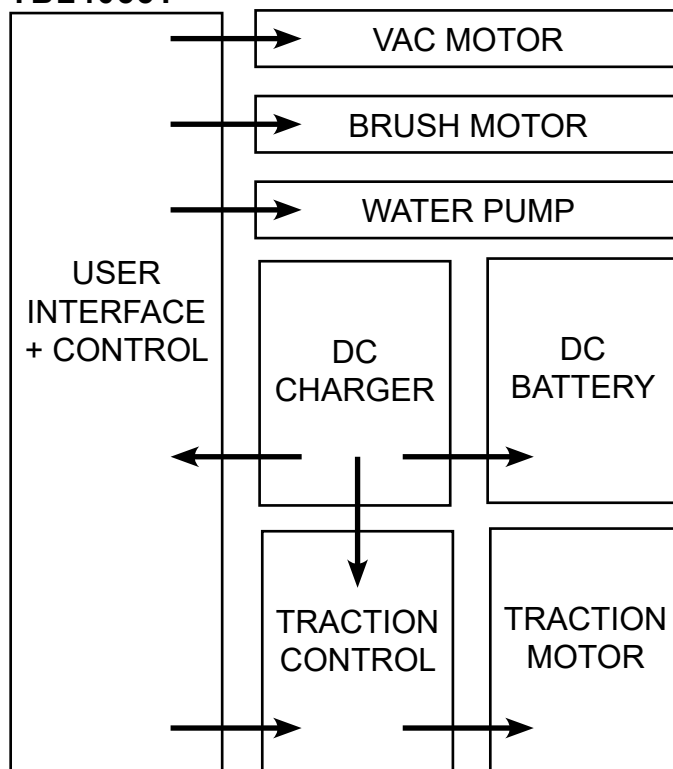
Schematic Diagram

TBL4045

TBL4055



TBL4055T



Wiring diagram is available on request.

Specifications

Model - TBL 4045 (Non Traction Models)					
Brush Motor		Vac Motor	Brush Sizes	Pad Sizes	Charger
300 W		400 W	450 mm	400 mm	20 Amp
Protection Class		Brush Speed	Water Capacity	Fluid Flow	Hand Arm Vibration
IPX4		140 RPM	40 L	0 - 2 L/Min	≤2.5m/s²
Brush Pressure		Dimensions			
25 g/cm²		Width = 470mm (805mm) / Length = 1070mm (1155mm) / Height = 1160mm			
50 Ah					
Net Weight	Gross Weight (Full)	Sound Pressure Level	Run Time	Maximum Climbing Gradient	Re-charge Time
119.3 kg	159.3 kg	LpA ≤ 70 dB(A)	1 hr 40 mins average	Scrubbing 9 %	2.5 hrs
100 Ah					
Net Weight	Gross Weight (Full)	Sound Pressure Level	Run Time	Maximum Climbing Gradient	Re-charge Time
130.64 kg	170.64 kg	LpA ≤ 70 dB(A)	3 hrs 10 mins average	Scrubbing 9 %	5 hrs

Model - TBL 4055 (Non Traction Models)					
Brush Motor		Vac Motor	Brush Sizes	Pad Sizes	Charger
300 W		400 W	550 mm	508 mm	20 Amp
Protection Class		Brush Speed	Water Capacity	Fluid Flow	Hand Arm Vibration
IPX4		140 RPM	40 L	0 - 2 L/Min	≤2.5m/s²
Brush Pressure		Dimensions			
24 g/cm²		Width = 560mm (948mm) / Length = 1115mm (1200mm) / Height = 1160mm			
50 Ah					
Net Weight	Gross Weight (Full)	Sound Pressure Level	Run Time	Maximum Climbing Gradient	Re-charge Time
113.85 kg	153.85 kg	LpA ≤ 70 dB(A)	1 hr 38 mins average	Scrubbing 9 %	2.5 hrs
100 Ah					
Net Weight	Gross Weight (Full)	Sound Pressure Level	Run Time	Maximum Climbing Gradient	Re-charge Time
124.65 kg	164.65 kg	LpA ≤ 70 dB(A)	3 hrs 09 mins average	Scrubbing 9 %	5 hrs

Model - TBL 4055T (Traction Models)					
Brush Motor		Vac Motor	Brush Sizes	Pad Sizes	Charger
300 W		400 W	550 mm	508 mm	20 Amp
Protection Class		Brush Speed	Water Capacity	Fluid Flow	Hand Arm Vibration
IPX4		140 RPM	40 L	0 - 2 L/Min	≤2.5m/s²
Brush Pressure		Dimensions			
24 g/cm²		Width = 560mm (948mm) / Length = 1115mm (1200mm) / Height = 1160mm			
50 Ah					
Net Weight	Gross Weight (Full)	Sound Pressure Level	Run Time	Maximum Climbing Gradient	Re-charge Time
123.83 kg	163.83 kg	LpA ≤ 70 dB(A)	1 hrs 33 mins average	Scrubbing 9 %	2.5 hrs
100 Ah					
Net Weight	Gross Weight (Full)	Sound Pressure Level	Run Time	Maximum Climbing Gradient	Re-charge Time
134.71 kg	174.71 kg	LpA ≤ 70 dB(A)	3 hrs 04 mins average	Scrubbing 9 %	5 hrs

Part No.	BRUSHES	Part No.	SQUEEGEE
606203	450mm Polyscrub Brush	900521	650 Semi Parabolic Squeegee (4045G)
606204	450mm Nyloscrub Brush	900522	750 Semi Parabolic Squeegee (4045G)
606306	450mm Longlife Brush	900518	650 Floor Tool Blades - Green PU
900525	400mm NuLoc2 Drive Board	900519	750 Floor Tool Blades - Green PU
606401	400mm Padloc Drive Board	206953	Detent Pin
Part No.	HOSES	Part No.	FILTERS
606028	550MM Polyscrub Brush	208888	Clean Water Filter
606550	550MM Nyloscrub Brush	208890	Clean Water Filter Clear Bowl
606551	550MM Longlife Brush	237268	Filler Cap Lid
900526	500mm NuLoc2 Drive Board	577839	Separator
213058	Vac Hose	207128	Filler Cap Filter
280019	Floor Tool Hose	206265	Barrel Filter
280018	Dump Hose - Top Tank	207000	Basket Filter
213025	Dump Hose - Bottom Tank	208830	Clean Water Filter Gasket
208960	Filler Hose - Bottom Tank	208827	Clean Water Filter Body
237718	Hose Guide	208889	Clean Water Filter Mesh
206111	Dump / Filler Closure - Bottom Tank		

For optimum performance Numatic International Ltd recommend the use of the following batteries in the Twintec machines.

Machine	Numatic Recommended Battery			Part Number
TBL4045 / 4055 / 4055T	NX1K LFP battery type (Li-ion)			911948
Make	Voltage	Capacity/Energy	Weight	Size
NX1K Battery	25.6 V	50Ah / 1280 Wh	10.8 kg	315mm (L) x 132mm (W) x 185mm (H)

Trouble Shooting

PROBLEM	CAUSE	SOLUTION
Machine will not operate	Low battery charge	Charge batteries (page 13)
Vacuum will not operate	Waste water tank full	Empty waste water tank (page 11)
Poor water pick-up	Waste water tank full Clogged / blocked vacuum hose Loose hose connections Debris basket filter clogged / blocked Separator filter clogged / blocked Poor separator seal Damaged separator seal Damaged / split vacuum hose Damaged floor tool blades Low battery charge	Empty waste water tank (page 11) Remove and clean (page 11) Push tight connections (page 6) Remove and clean (page 11) Remove and clean (Page 11) Clean and refit (page 11) Renew (contact service dept) Renew (contact service dept) Renew (contact service dept) Re-charge batteries (page 13)
No brush / scrub function	No brushes fitted	Check and fit (page 6)
Little or no water flow	Clean water tank empty Clean water tank filter blocked / clogged Water flow not on Brush deck raised	Fill clean water tank (page 7) Remove and clean (11) Switch on water flow (Page 6) Lower brush deck (page 9)
Machine just 'stops' while operating	Too much load on the brush system	Decrease the brush load to best suit the floor type.

Warning Do not fit a replacement fuse link having a higher rating than the value stated on the fuse label.

TBL Fault Codes

Contact Service Agent

Green Status Indicator	Fault	Possible Cause	Effect on Product	Investigate the Following	Action Required	If Fault Persists
1 Flash with pause ●	Batteries voltage low	Batteries not been charged Possible bad connection between batteries, controller, charger or fuses caused by loose connections, damaged wiring, water ingress Not accepting charge due to faulty battery / cell Charger not functioning	Operating time severely reduced or machine will not operate	Check when machine last charged Switch OFF the machine : Remove Fuses Check connections to batteries, charger and fuses for loose wires or screws Check each battery Voltage individually to detect defect unit 10.5V min Check battery voltage and charge current ensuring charger red fault light is extinguished	Charge batteries immediately Tighten loose connections and replace damaged components Replace batteries as required Replace charger	
2 Flashes with pause ●●	Traction motor disconnected	The motor has a bad connection Motor disconnected TCO activated (Thermal Cut Out) Motor failed to open circuit	The motor will not operate	Check all connections and leads between motor and controller	Tighten loose connections and replace damaged components	
3 Flashes with pause ●●●	Traction motor wiring trip	The motor has a short circuit to a battery	Motor will not operate	Check all connections and leads between the motor and controller		
4 Flashes with pause ●●●●	Battery Lockout	The battery charge level has fallen below the battery lockout level and the controller is inhibiting machine functions The controller is being inhibited from driving, this may be because the battery charger is connected	Machine functions not working	Check battery voltage and charge current ensuring charger red fault light is extinguished Check each battery voltage individually to detect defect unit 10.5V min Remove charger to operate machine	Charge batteries immediately	
6 Flashes with pause ●●●●●●	Charger connected	A controller trip is indicated	Machine functions not working	Check all connections and leads	Tighten loose connections and replace damaged components	
8 Flashes with pause ●●●●●●●●	Controller trip	Poor brake connections Brake failure or deactivation	Traction drive disabled	Check brake wiring and brake lever	Replace brake or wiring as necessary. Reactivate brake by engaging brake lever	
9 Flashes with pause ●●●●●●●●●●	Brake deactivated or failed	Poor connections between battery controller and traction motor	Machine functions not working	Check each battery Voltage individually to ensure voltage < 14 volts Check connections on controller batteries and traction motor Check combined battery pack voltage is < 28 volts		
10 Flashes with pause ●●●●●●●●●●●●	High battery voltage					

Numatic Warranty

Numatic International Limited warrant to the original purchaser that its products are free of defects in both material and workmanship for the period shown below:-

Homecare and Procure Vacuum cleaners.....	2 Years
Rotary Floor Machines.....	1 Year
Twintec Auto Scrubber Dryer.....	1 Year
Vario Ride-On Scrubber Dryer.....	1 Year / 1500 hours
Mopping, Compacts, Versaclean and Versacare Products.....	1 Year
Individual Accessories and Spare Parts.....	6 Months

Note: This warranty expressly excludes consumable parts such as carbon brushes, floor brushes, mops, batteries etc, that are considered replaceable from time to time during the normal working life of the machine.

Our goods come with guarantees that cannot be excluded under the New Zealand Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

The benefits under (Our Warranty) are in addition to other rights and remedies under a law in relation to the (goods/services)

A. The warranty period commences from the date the goods are purchased. We advise all purchasers to retain their invoice as proof of purchase.

B. All warranty claims must be processed through either the Dealer from whom the equipment was originally purchased or another authorised Proquip NZ Ltd dealer. The Dealer will co-operate with the purchaser throughout the warranty claims procedure and will arrange any necessary repairs using genuine Numatic parts.

C. If the original Dealer is no longer able to fulfil his obligations please contact Proquip NZ Ltd with full details of the claim and proof of purchase so that this may be processed without delay.

D. Any warranty claim can only relate to the specific part that is proven to be at fault and for which a replacement will be supplied but cannot be extended to constitute a claim against the complete machine.

E. Proquip NZ Ltd will supply the Dealer with any warranty parts required, subject to the claim being validated.

F. Claims will not be accepted if they are the result of fair wear and tear, misuse or abuse of any kind.

G. No replacement will be given unless the appropriate evidence of the validity of the claim has been provided to the satisfaction of Proquip NZ Ltd.

H. Proquip NZ Ltd reserve the right to charge for any work carried out as a result of an invalid claim.

I. No variation to this warranty may be made or implied by any member of Proquip NZ Ltd or its Dealers unless such variation is in writing and authorised by the Company.

New Zealand Importer.

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Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

[illegible]

This Machine Has Been Packed
With The Following

Brush / Pad

☐

Floor Tool

☐

Charging Lead

☐

Battery

☐

Fuse Pack

☐

Signed

Numatic

numatic.com

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